PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES RECONSTRUCTING THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 355 (ROCKVILLE PIKE) AT HALPINE ROAD IN MONTGOMERY COUNTY. MAST ARMS. LED TRAFFIC SIGNAL HEADS AND ACCESSIBLE PEDESTRIAN SIGNALS WILL BE INSTALLED. THE CURRENT TRAFFIC SIGNAL PHASING WILL BE MODIFIED TO INCLUDE A LEADING PEDESTRIAN INTERVAL (LPI). MD 355 RUNS IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

NORMAL OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX PHASE, FULL-TRAFFIC ACTUATED MODE. WITH THE MD 355 APPROACHES RUNNING CONCURRENTLY AND THE HALPINE ROAD APPROACHES RUNNING CONCURRENTLY.

NORTHBOUND AND SOUTHBOUND MD 355 HAVE EXCLUSIVE/PERMISSIVE LEFT TURN PHASES. EASTBOUND AND WESTBOUND LEFT TURN MOVEMENTS ON HALPINE ROAD ARE PERMISSIVE.

NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTON MOVEMENTS TO CROSS ALL FOUR LEGS OF THE INTERSECTION ARE TO BE PROVIDED.

A LEADING PEDESTRIAN PHASE WILL BE PROVIDED FOR CROSSING MD 355 (ROCKVILLE PIKE).

CONTROLLER INFORMATION

THE EXISTING CONTROLLER AT THE INTERSECTION WILL BE REPLACED WITH A NEMA EIGHT-PHASE, FULLY ACTUATED CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A BASE-MOUNTED CABINET.

SEE GENERAL NOTES ON SHEET FOR INSTRUCTIONS CONCERNING NAVIGATOR CENTRAL CONTROL UNIT.

PROJECT CONTACTS

CONT	ACT	PERSONS	FOR
DIST	RICT	'3'ΔRF .	AS FOLL

DISTRICT 3 ARE AS FOLLOWS:

MR. JEFFREY WENTZ ASSISTANT DISTRICT ENGINEER TRAFFIC - 301-513-7318

MR. WAYNE MOWDY ASSISTANT DISTRICT ENGINEER MAINTENANCE - 301-513-7304

MR. AUGIE REBISH UTILITY ENGINEER UTILITIES - 301-513-7350 CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD DAFF. SR. CHIEF, TRAFFIC OPERATIONS DIVISION 410-787-7630

MR. ED RODENHIZER CHIEF, SHA SIGNAL SHOP 410-787-7652 ROBERT SNYDER

CONSTRUCTION INSPECTION 410-545-0390

CONTACT FOR MONTGOMERY COUNTY: MR. KAMAL HAMUD MONTGOMERY COUNTY DEPARTMENT

OF PUBLIC WORKS 240-777-8795

CONTACT FOR RED LIGHT CAMERA:

MR. MICHAEL KINNEY ATMS ENGINEER, MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS 240-777-8760

EQUIPMENT LIST "A"

EQUIPMENT TO BE SUPPLIED BY THE SHA.

:	ITEM NO.	QUANTITY	DESCRIPTION
	9041	1 EA	NEMA EIGHT-PHASE, FULL-TRAFFIC ACTUATED CONTROLLER WITH TELEMETRY.
	9044	1 EA	CONTROLLER CABINET, SIZE 6
	9571	105 SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGNS
	. •		2 EA - D-3(2) "ROCKVILLE PIKE" (VAR. X 16")

1 EA - M95-1 (78" X 24")

NORTH, LEFT ARROW, MD. 355, SOUTH, RIGHT ARROW

8014

8017

8018

8019

8022

8026

8 EA

2 EA

1 EA

1 EA

4 EA

EQUIPMENT LIST "A" cont'd.

ITEM NO	• QUANTITY	DESCRIPTION
		1 EA - M95-1 (78" X 24")
	· · · · · · · · · · · · · · · · · · ·	SOUTH, LEFT ARROW, MD. 355, NORTH. RIGHT ARROW
	•	2 EA - D-3(2) "HALPINE ROAD" (VAR. X 16")
		2 EA - R3-5L "LANE USE CONTROL - LEFT ONLY" (30" X 36")
		1 EA - R3-5R "LANE USE CONTROL - RIGHT ONLY" (30" X 36")
		3 EA - R4-7 "KEEP RIGHT" (24" X 30")
e e e e e e e e e e e e e e e e e e e	· ·	8 EA - R10-4(1) MOD "PUSH BUTTON TO CROSS" (W/INSTRUCTIONS) (9" X 15
		1 EA - R3-7R "RIGHT LANE MUST TURN RIGHT EXCEPT BUSES" (30" X 40")
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT (FOR 4 CAMERAS)

EQUIPMENT LIST "B"

r		TO DE EUD	NICHED AND OD INCTALLED BY THE CONTRACTOR.
		OUANTITY	NISHED AND/OR INSTALLED BY THE CONTRACTOR: DESCRIPTION
-	1001	2 EA	MAINTENANCE OF TRAFFIC
	2001	23 CY	CLASS 2 EXCAVATION
•	2002	5 CY	TEST PIT EXCAVATION
	5001	30 LF	5" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
	5002	1200 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
	5003	22 EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LETTERS AND ARROWS
	5004	1400 LF	12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
	5005	200 LF	24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
	5006	8 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LETTERS
	5007	2 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
	6001	200 LF	DEPRESSED CURB AND GUTTER
	6002	1900 SF	4" CONCRETE SIDEWALK
	8001	44 EA	12 IN. LED SIGNAL HEAD SECTION
			12 EA - RED BALL SECTION
		. "	12 EA - YELLOW BALL SECTION
			12 EA - GREEN BALL SECTION
			4 EA - YELLOW ARROW SECTION
			4 EA - GREEN ARROW SECTION
	8002	1 EA	2 WIRE CENTRAL CONTROL UNIT
	8005	1 EA	ADJUST EXISTING MANHOLE TO GRADE INCLUDING COLLAR
	8008	8 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGN (5"X7" WITH BRAILLE DENOTING CROSSING STREET)
	8009	5 EA	FURNISH BREAKAWAY PEDESTAL POLE 4 EA 10' BREAKAWAY PEDESTAL POLE 1 EA 5' STUB BREAKAWAY PEDESTAL POLE
	8012	5 EA	INSTALL BREAKAWAY PEDESTAL POLE 4 EA 10' BREAKAWAY PEDESTAL POLE

1 EA 5' STUB BREAKAWAY PEDESTAL POLE

16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD

MAST ARM POLE AND 60 FT MAST ARM (15 FOOT "T" DIMENSION)

MAST ARM POLE AND 70 FT MAST ARM (15 FOOT "T" DIMENSION)

MAST ARM POLE AND 50 FT MAST ARM (15 FOOT "T" DIMENSION)

REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT

VIDEO DETECTION CAMERA AND CABLE (UP TO 500 FT)

EQUIPMENT LIST "B" cont'd

	ITEM NO.	QUANTITY	DESCRIPTION
	8030	25 LF	3 IN ELECTRICAL CONDUIT - PVC RISER
~	8031	288 LF	CABLE - 1 CONDUCTOR, 250 KCML, CU (USE 3 WIRES)
	8032	475 LF	DISCONNECT. PULL BACK AND REROUTE CABLES
	8034	275 LF	SCHEDULE 80 RIGID PVC CONDUIT 4 IN - SLOTTED
	8035	320 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 IN - TRENCHED 163 FT. SCHEDULE 80 RIGID PVC CONDUIT 4 IN - TRENCHED 157 FT. SCHEDULE 80 RIGID PVC CONDUIT 3 IN - TRENCHED
	8038	88 SF	DETECTABLE WARNING SURFACE
	8039	105 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGNS
	8040	930 SF	REMOVE AND REINSTALL DECORATIVE BRICK SIDEWALK
	8041	540 LF	STRANDED BARE COPPER GROUND WIRE NO. 6 AWG
	8043	1 EA	METERED SERVICE PEDESTAL
	8047	6 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
	8054	1400 LF	ELECTRICAL CABLE - 2 CONDUCTOR NO.14 AWG
	8056	1550 LF	ELECTRICAL CABLE - 5 CONDUCTOR NO.14 AWG
	8057	1910 LF	ELECTRICAL CABLE - 7 CONDUCTOR NO.14 AWG
	8065	1 EA	INSTALL CONTROLLER CABINET - BASE MOUNT

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 355 (ROCKVILLE PIKE) AND HALPINE ROAD SIGNAL RECONSTRUCTION AND INSTALLATION OF APS

15035507.36

SHEET NO. 3 OF 3

TOD NO:AT910-27 SHA NO:MO579A5E/B5E PROJECT ESTIMATES MD 355@ HALPINE RD

Edwards , ANDKelceu Suite 110 410-747-3420

5523 Research Park Drive Baltimore, Maryland 21228

SCALE NOT TO SCALEVERTISED DATE 1/107 CONTRACT NO. AT9105185 H. DONG COUNTY MONTGOMERY DRAWN BY

CHECKED B M-5-113(1) TOD NO. F.A.P. NO. TS NO. 1076-E DRAWING TS ·-· 1 OF 1

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